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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,668	07/31/2003	Corey Billington	10017471-1	3567
22879	22879 7590 10/21/2005		EXAMINER	
HEWLETT PACKARD COMPANY			FAROOQ, MOHAMMAD O	
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400		ART UNIT	PAPER NUMBER	
		2181	-	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/632,668	BILLINGTON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Mohammad O. Farooq	2182				
The MAILING DATE of this communication app	<u> </u>	i I				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of the provision	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 21 Ju	ulv 2005.					
3) Since this application is in condition for alloward	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-34</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-34</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) ☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on 31 July 2003 is/are: a)[by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
2) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)				

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DETAILED ACTION

1. This application is a continuation-in-part (CIP) of copending application no. 09/907,212 filed July 16, 2001.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-7, 10-16, 21-23 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. US 2002/0138162, in view of Chang et al. US 2002/0078149.
- 3. As to claim 1, Lee et al. teach system, comprising:
 - a processing center, including:
 - a processor (item 115, fig. 1);
 - a data bus in data communication with the processor (item 140, fig. 1);
 - a concurrency device, operably coupled to the data bus (item 120, fig. 1);
 - a wireless data connection, operably coupled to the concurrency device (fig. 1); and

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a plurality of ultra-thin clients, each further comprising a communication device including a wireless data connection, whereby each of the ultra-thin clients can be in data communication with the concurrency device, and can be located in relation to the processing center without cabling (page 1, paragraph 0004, 0008, and 0009; fig. 1 and fig. 3b).

Lee et al. do not teach share in a processing capability of the processing center. Chang et al. teach share in a processing capability of the processing center (page 11, paragraph 170). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Lee et al. and Chang et al. because that would allow users to output to an output device with or without connection to a static network (page 2, paragraph 0016).

- 4. As to claim 2, Lee et al. teach system, wherein at least one of the ultra-thin clients comprises at least one keyboard and at least one monitor operatively connected (inherent) to the communication device of the ultra-thin client, whereby the ultra-thin client can comprise and I/O interface between a user and the processing center (inherent; fig. 1; paragraph 0004).
- 5. As to claim 3, Lee et al. teach system, further comprising at least one of: a) a pointing device (e.g. mouse); b) a printer; c) a game console; d) a joystick; e) an image projector; f) an image capture device; g) a plotter; h) a scanner; and i) an audio reproduction device (paragraph 0004).
- 6. As to claims 4 and 5, Lee et al. teach system, wherein the system is configured for home use (inherent, fig. 1) and for use in one of: a) a workgroup; b) a business facility; and, c) an office (inherent, fig. 1).

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7. As to claims 6 and 10, Lee et al. teach system, wherein the processing center comprises a computer (item 110, fig. 1) and the computer comprises a PC (paragraph 0005).

- 8. As to claim 7, Lee et al. teach system, wherein the system is configured to facilitate connection of a shared peripheral device (i.e. video system; items 135a and 135b; fig. 1).
- 9. As to claim 11, Lee et al. teach system, comprising:

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a processing center, including a processor (item 115, fig. 1);
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a system bus connected to the processor (item 140, fig. 1);

a concurrency device connected to the system bus (item 120, fig. 1);

a plurality of ultra-thin clients (paragraph 0004);

a plurality of wireless data connections between the concurrency device and the plurality of ultra-thin clients (inherent; fig. 1);

whereby the ultra-thin clients can be conveniently placed in wireless relation to the processor (inherent; fig. 1).

Lee et al. do not teach use the processing capability of the processor. Chang et al. teach use the processing capability of the processor (page 11, paragraph 170). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Lee et al. and Chang et al. because that would allow users to output to an output device with or without connection to a static network (page 2, paragraph 0016).

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10. As to claims 13 and 14, Lee et al. teach system, wherein at least one of the ultra-thin

client is configured for use in a kitchen environment and to facilitate entertainment (inherent, fig.

1; paragraph 0004).

11. As to claims 21 and 23, Lee et al. do not teach Internet and a server.

Chang et al. teach Internet and a server (paragraph 0002; items 110 and 114; fig. 1).

However, it would have been obvious to one of ordinary skill in the art at the time of invention to

combine the teachings of Lee et al. and Chang et al. because that would provide pervasive output

capability (abstract).

12. As to claims 27 and 28, Lee et al. teach system, wherein the concurrency device and at

least some wireless connection are combined on a single card connectable to the system data bus

(item 120, fig. 1) and hardware includes an antenna (paragraph 0032).

13. As to claim 29, Lee et al. teach method, comprising the steps of:

providing a processing center including a processor and a system bus (item 115 and 140;

fig. 1);

providing for connecting a concurrency device to the system bus to enable connection of

multiple ultra-thin clients to the processor (fig. 1);

providing for connection of the multiple ultra-thin clients to the processing center through

the concurrency device (item 120, fig. 1);

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providing wireless connection configured to enable data communication between the concurrency device and the multiple ultra-thin clients (fig. 1).

Lee et al. do not teach share in a processing capability of the processing center. Chang et al. teach share in a processing capability of the processing center (page 11, paragraph 170). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Lee et al. and Chang et al. because that would allow users to output to an output device with or without connection to a static network (page 2, paragraph 0016).

- 14. Claims 12, 15,16 and 22 are similar in limitations as claims 3-5. Lee et al. and Chang et al. in combination teach apparatus as set forth in claims 3-5. Therefore, Lee et al. and Chang et al. in combination also teach apparatus as set forth in claims 12, 15, 16 and 22.
- 15. Claims 8,9,17-20, 24-26 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. US 2002/0138162, in view of Chang et al. US 2002/0078149 further in view of Beck et al. 2001/0049276.
- 16. As to claims 8 and 9, Lee et al. teach wireless connection and processing center (paragraph 0004 and item 110, fig. 1).

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Neither Lee et al. nor Chang et al. teach PPN facilitating connection of peripheral device for shared use by users on the network system; power and data connection for the printer and at least one additional peripheral device and a power supply shared by the printer and the at least one additional peripheral device. Beck et al. teach teach PPN facilitating connection of peripheral device for shared use by users on the network system; power and data connection for the printer and at least one additional peripheral device and a power supply shared by the printer and the at least one additional peripheral device (paragraph 0036). However, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Lee et al. and Chang et al. with Beck et al. because that would provide checking whether data received from the outside through a wireless channel exists (paragraph 0022).

- 17. Claims 17-20 and 24-26 are similar in limitations as claims 8 and 9. Lee et al., Chang et al. and Beck et al. in combination teach system as set forth in claims 8 and 9. Therefore, Lee et al., Chang et al. and Beck et al. in combination also teach system as set forth in claims 17-20 and 24-26.
- 18. Claims 30-34 are similar in limitations as claims 8 and 9. Lee et al., Chang et al. and Beck et al. in combination teach system as set forth in claims 8 and 9. Therefore, Lee et al., Chang et al. and Beck et al. in combination also teach system as set forth in claims 30-34.

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Response to Arguments

19. Applicant's arguments filed July 21, 2005 have been fully considered but they are not persuasive.

20. The examiner would like to state that claims are to be given broadest reasonable interpretation. Item 120 of figure 1 in reference Lee et al. communicates with both a mouse (item 130b, fig. 1) and a keyboard (item 125, fig. 1); therefore, enabling a multi-tasking or concurrent communication. This fulfills the requirement of a concurrency device. Furthermore, the examiner disagrees with the applicant neither references share a processing center. As stated above regarding item 120 of figure 1 being a multi-tasking device which therefore requires sharing of a processing center; this point is further elaborated in page 1, paragraph 0009; wherein it is stated that item 120, figure 1 may be a multiple receiver which requires sharing of a processing center. Therefore, Lee et al. teaches sharing of a processing center.

After considering all of the above facts, the examiner retains the rejection of previously rejected claims.

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21. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-

4144. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohammad O. Farooq October 14, 2005 SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100